



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,481	03/28/2005	Kunio Fukuda	450100-04783	8089

7590 07/05/2007  
William S Frommer  
Frommer Lawrence & Haug  
745 Fifth Avenue  
New York, NY 10151

EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT PAPER NUMBER

2617

MAIL DATE DELIVERY MODE

07/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Adachi, US 6,018,642.

Regarding claim 13, Adachi discloses a wireless communication system comprising a plurality of wireless terminal devices and a wireless communication management device for managing communication between the wireless terminal devices, wherein:

said wireless communication management device comprises beacon transmission means for transmitting main beacons (reads on beacons received regularly from the base station) at a fixed interval to perform synchronization in said wireless communication system and for transmitting sub beacons(reads on time extension information from base station) between said main beacons, wherein said main beacon and said sub beacon include beacon time period information indicating a period of time until said main beacon is transmitted next, and **at least one** of idle information to allow an unspecified wireless terminal device of said wireless terminal devices to perform transmission, polling information to make a specified wireless terminal device of said

Art Unit: 2617

wireless terminal devices perform transmission, transmission notification information to make an advance notice of transmission of transmission data after transmission of said beacon to a specified wireless terminal device of said wireless terminal devices, transmission notification information to make an advance notice of transmission of data after transmission of said beacon to a specified wireless terminal device of said wireless terminal devices (see col. 10, line 39- col. 11, line 4 and lines 12-51), **and transmission acknowledgement information indicating for a specified wireless terminal device of said wireless terminal devices whether reception of data transmitted from the wireless terminal device was successful or unsuccessful** (see col. 15, lines 23-65);

and said wireless terminal device comprises:

data division means for comparing said beacon time period information included in said main beacon or said sub beacon received, with a required transmission time of transmission data (reads on predetermined period of time set for data receive ready period), and then dividing the transmission data so that transmission of the transmission data divided is finished before next transmission of said main beacon is started when the required transmission time is the beacon time period information or longer (i.e., when data is transmitted beyond the data receive ready period); and data transmission means for transmitting said transmission data (see col. 6, lines 45-59).

Regarding claim 14, Adachi discloses a wireless terminal device for performing wireless communication under the control of a prescribed wireless communication management device, said wireless terminal device comprising:

Art Unit: 2617

reception means for receiving main beacons that are transmitted at a fixed interval from said wireless communication management device and a sub beacon that is transmitted between the main beacons; data division means for comparing beacon time period information that is included in said main beacon and said sub beacon received and indicates a period of time until said main beacon is transmitted next, with a required transmission time of transmission data, and when said required transmission time is said beacon time period information or longer, dividing said transmission data so that transmission of the transmission data divided is finished before next transmission of said main beacon is started; and data transmission means for transmitting said transmission data (see col. 6, lines 45-59, col. 10, line 39- col. 11, line 4 and lines 12-51 and col. 15, lines 23-65).

Regarding claim 15, Adachi discloses a communication control method in a wireless communication system comprising a plurality of wireless terminal devices and a wireless communication management device for managing communication between the plurality of wireless terminal devices, wherein:

main beacons for performing synchronization in said wireless communication system are transmitted at a fixed interval from said wireless communication management device, and sub beacons are transmitted between said main beacons from said wireless communication management device; said main beacon and said sub beacon includes beacon time period information indicating a period of time until said main beacon is transmitted next, and at least one of idle information to allow an unspecified wireless terminal device of said wireless terminal devices to perform

Art Unit: 2617

transmission, polling information to make a specified wireless terminal device of said wireless terminal devices perform transmission, transmission notification information to make an advance notice of transmission of transmission data after transmission of said beacon to a specified wireless terminal device of said wireless terminal devices, **and transmission acknowledgement information indicating for a specified wireless terminal device of said wireless terminal devices whether reception of data transmitted from the wireless terminal device was successful or unsuccessful;** and said wireless terminal device compares said beacon time period information included in said main beacon or said sub beacon received, with a required transmission time of transmission data, and when the required transmission time is the beacon time period information or longer, divides said transmission data so that transmission of the transmission data divided is finished before next transmission of said main beacon is started, and transmits the transmission data (see col. 6, lines 45-59, col. 10, line 39- col. 11, line 4 and lines 12-51 and col. 15, lines 23-65).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Meier, US Pub. No. 2006/0092868 discloses a point controlled contention arbitration in multiple access WLANs.

Myles et al., US Pub. No. 2007/0091934 discloses a method and apparatus for clock synchronization in a wireless network.

Art Unit: 2617

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K. Contee whose telephone number is 571.272.7906. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571.272.7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC

  
**JOY K. CONTEE**  
**PATENT EXAMINER**